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MARMA AND MARMA THERAPY: A REVIEW

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ABSTRACT

Ayurveda is a science of life which believes in treating mind, body and soul for ensuring a complete state of health and this ancient wisdom is well reflected in the unique concept and composition of marma also. Marma are not only anatomical landmarks but they are also the sites where tridosha are present with their subtle forms Prana, Ojasa (soma) and Tejas (agni). They also contain 3 gunas namely sattva, raja, tamas (manas contents) and soul or life force (bhutatma). Detailed description on marma and marma chikitsa is available in Sushruta Samhita and Siddha respectively. Manipulating or stimulating Marma in the management of various diseases is called Marma Chikitsa/ Therapy. Through stimulation of marma by various methods the Prana (vital energy) existing in marmas may be directed to remove blockages (even

in remotely connected areas) and stimulate energy flow thus resulting in a state of healthy body, mind and spirit. This article aims to provide an overview on marma and marma therapy. Details are collected from ancient science texts, Ayush physicians/surgeons, internet and personal experience.

KEYWORDS: Marma, Varmam point, Prana, Siddhar.

INTRODUCTION

Marma is defined as anatomical site where muscles, veins, ligaments, bones and joints meet together.^[1] There are one hundred and seven (107) marmas (vital spots) out of which eleven are present in each limbs, twenty six in trunk (three in abdomen, nine in thorax, fourteen in the back) and thirty seven in head neck region.^[2,3,4] They are also the sites where not only tridosha are present but their subtle forms prana, ojus and tejas are also present with sattva, raja and tama.^[5] Vagbhata defines that marma is the meeting point of mamsa, asthi, sira, snayu, damni and sandhi and is where the prana is present.^[6] However it is also opined that marma can be constituted by the one or more of the above. This is very much similar with that of Chinese meridian concept in which the points appear either on single meridian line or at the meeting points of different meridians.^[7] Vagbhata also states that marma is a place where unusual pulsations (visham spandana) can be felt and where shall be the tenderness on pressure (peeditae ruka).^[8] In Charaka Samhita, though marma are referred and stated but their details are not available.^[9,10] Sushruta defined marma as the collective point of meeting of above mentioned dhatu except dhamani. He has used the term marma both for diseases of vital organ system as well as the topographical cure points, therefore the marma in the system should be saved by stimulating topographical cure points.^[11] According to Siddhar varmam points are the places in the body where the subtle varmam energy is found.^[12] Marma is the point on the body where the blockage of energy is felt.^[13] It is the junction between physiology and consciousness, and by touching it changes the body's biochemistry and can unfold radical and alchemical change in one's make up.^[14] Stimulation of these inner pharmacy pathways signals the body to produce exactly what it needs including hormones and neurochemicals that heal the body, mind and consciousness.^[14] Marma points are specific areas on the body, which has relation through pranic channels to various internal organs, doshas and srotas. These points are being used during abhyanga along with the application of different kinds of medicated and aromatic oils to stimulate internal organs.^[15]

According to Siddhar Varmam is a subtle energy which helps in the proper functioning of the body and life force. Marmas are invisible but could be traced at a point where body, mind and psychic energies are concentrated together. These points are located at nadis, nerves, blood vessels, junction of bones, muscles and tissues and are spread throughout the body. Though varmam texts mention the existence 8000 varmam points in the body but there is general notation that there are 108 varmam points which serve as the basis for the art of varmam. They are classified in to 12 paduvarmam (points which are connected with the nerves of the

brain directly or indirectly and these points aid in alleviating brain related disorders) and 96 thoduvaram.^[16] Ayurveda is a science of life which believes in treating mind, body and soul for ensuring a complete state of health. Manipulating or stimulating marma points in the management of diseases is called marma chikitsa and it is an inherent power of human to heal itself through these points. Through stimulation of marma by various means and methods, the Prana (vital energy) existing in it may be directed to remove blockages (even in remotely connected areas) and stimulate energy flow thus resulting in a state of healthy body, mind and spirit. A judicious application of pressure on appropriate marma can restore the normal functioning of prana (in diseased body parts) where as their improper manipulation may cause severe pain, disability, deformity and even death.

MATERIAL AND METHODS

Data was gathered from ancient science texts, Ayush physicians/surgeons, internet and personal experience.

History

Marma science is part of Vedic science. Naturally it has influenced all other sciences which we find in Veda (400BC) like Ayurveda, Yoga, Martial arts, Sidha system of medicine etc. the first reference is found in Rig Veda that there is reference of words like Varman or drapi, which is some kind of body armour or corselet to protect the body from the assault of enemy weapons. In Atharva-Veda also we find the reference of the term kavacha or corselet or breast plate for protection.^[17] In Mahabharata the great epic also we find many references for Marma or Varma. Martial art became effective and popular for self defense because the monks were able to protect themselves against weapons due to knowledge of marma. As non violence was taught by this religion, they were not allowed to use weapons even for their self protection, hence the art of marma was taught to all monks for unarmed self protection. This art was kept as secret for centuries, as it was taught only to certain disciples. As the monks started travelling to various countries like Japan, China, Indonesia etc. this art also spread to these countries. It is therefore very certain that the traditional Chinese medicine had adopted this science from Ayurveda.

Synonyms

Marma, Varmam (Sidda), Praanasakthi (sage Patanjali), Vethasatthi (Thriumoolar), Kaalam, Puravi, Yogam, Saram, Pranam, Swaasam, Kalai, Sivam, Vassi.

Etymology of Marma

The word marma comes from Sanskrit origin word 'mri' meaning death. Marma are the vital areas of the body. Its importance is explained by the Sanskrit phrase 'Maryanti iti marmani' which means that any harm to these points is hazardous or any injury to these parts may lead to severe pain, disability, loss of function, loss of sensation and death.^[18] Acharya Sushruta (revered as father of surgery) also mentioned in Sushruta Samhita that these points should be protected from any injury during surgery. Marma also means secret or latent power.^[19]

Classification of Marma^[20]

In Ayurveda there are total 107 marma (upper and lower limbs 44, back-14, chest and abdomen-12, udarvajatrugata-37) in the body. These are divided into different groups according to the physical matrices and also on the basis of their special features. The classification according to Sushruta is only five but according to Vagabhata are six with inclusion of Dhamani marma.

SN	Classification	Marmas				
1	Physical component	Mamsa marma	Sira marma	Snayu marma	Asthi marma	Sandhi marma
	Number	11	41	27	8	20
	Names	Talhritya-4 Indrabasti-4 Stanarohita-2 Guda-1	Urvi-4 Lohitaksha-4 Nabhi-1 Hridaya-1 Stanamoola-2 Aplap-2 Apstambha-2 Parshavasandhi-2 Vrihati- 2 Manya,Neela-2,2 Matrika-8 Fana-2 Apanga-2 Shringataka-4 Sthapani-1	Kshipra-4 Kurcha-4 Kurchashira-4 Ani-4 Vitap-2 Kaksharadhara -2 Ansa -2 Basti-1 Utkshepa-2 Vidur-2	Katikataruna-2 Nitamba-2 Amsaphalaka-2 Shankha -2	Kukundara-2 Gulpha-2, Janu-2 Kurpar-2, Manibanda-2 Krikatika-2 Aavarta-2 Adipati-1 Simanta-5
2	Special features	Sadhya Pranahar (agni)	Kalantar Pranhara (agni+soma)	Vishalyaghan (vayu)	Vaikalyakara (somaya)	Rujakara (agni+vayu)
	Numbers and prognosis	19 Death within 7 days of injury	33 Death within 15 days to month	3 Death being the foreign body removed	44 Causes deformity	8 Causes excruciating pain
	Name	Hridya, Nabi, Basti, Guda, Matrika, Shringataka, Shankha, Adhipati	Kshipra, Talhritya, Indrabasti, Katikataruna, Parsharvasandhi, Vrihati, Nitamba, Stanamool, Stanarohita, Aplap, Apstamba, Simanta	Utksepa Sthapani	Lohitaksha, Sthapani, Janu, Ani, Urvi, Vitapa, Kurpara, Kukundara, Kakshadara Vidura, Krikatika, Amsa, Amsaphalaka, Neela, Manya, Fana, Avarta, Apanga.	Gulpha-2 Manibandha-2 Kurchashira-4

Marma pramana

SN	Pramana	Marma
1	1 angula	Urvi, Kurchashira, Vitapa, Kakshadhara, Stanamoola.
2	2 angula	Manibandha, Gulpha.
3	3 angula	Janu, Kurpara
4	Swapanital	Hridya, Basti, Nabhi, Guda, Kurcha, Shringataka, Simant, Matrika, Neela, Manya.
5	½ angula	Rest of all marma

Marmabhighata lakshan^[21]

Shakha marma (44)	Marma	Location of marma	Marmabhighat lakshan
1	Kshipra	Angusta anguli madhaya	Aakashepaen maranam
2	Talhritya	Madyamaangulim anupurvaena talasaya madyae	Rujabhi marnam
3	Kurcha	Kshiprasayoparistat ubhayatah	Bhramana, vaepanae
4	Kurchasira	Gulpha sandhaeraadha ubhyatah	Ruja, shofa
5	Gulfa (manibandha upper limb)	Paadjangyo sandhanae	Ruja, stabda padata, khanjata
6	Inderavasti	Janga madhyae	Shonit kshyae maranam
7	Janu (kurpar)	Jangourvu sandhanae	Khanjata
8	Aani	Jaunurdamubiyat trayangulam	Shophabhivridhi, stabdha sakthi
9	Urvi	Urumadhyae	Shonitkshyata sakthishosh
10	Lohitaksha	Urvyordavamadhovankshan sandhaer moolae	Lohikshyan pakshaghata
11	Vitap (kakshadhar)	Vankashana vrishanyor antarae	Shandaya, alpasukarata
Udarar-ura marma (12)			
1	Guda	Vatavarchonirnam, sthulantra pratibadham	Sadyomarnam
2	Vasti	Alpamansashonito abhyantartah ktyam mutrashayo	Sadyomarnam
3	Nabhi	Pakvaamashayormadhyae shira prabhava	Sadyomarnam
4	Hridya	Stanyormadhyam, satvarajatama adhistanam	Sadyamamarnam
5	Stanamool (2)	Stanyoradastad dwayangulam ubayataha	Kaphapuran kostataya kasa swasabhyam mriyatae
6	Stana rohit(2)	Stanachuchakayorurdhavam dwayangulam ubayatah	Lohitapuranakostaya kasa swasabhyam mriyatae
7	Aplap (2)	Ansakuty adastad pasharvo upari bhag	Raktaenpuyabhavam marnam
8	Apstambha(2)	urso ubhya, nadyo vatavahae	vatapurankostaya kasaswasabyam marnam

Prista marma(14)			
1	Kukunder	Parsharvajaghanbahirbagae pristavanshamubyatah natinimnae	Saparshagyanam, adhakayae chesto upgatah
2	Nitamba	Sronikandyauparyaashayaaachadanae parshavaantar pratibadho	Adhakayashoso daurbalyanch cha marnam
3	Parshava sandhi	Jagahan parsharvamadhyo tiryak udharvam cha jaghanat	Lohitapurnakostaya mriyatae
4	Katikaturuna	Pristavanshamubayatah pratishronikandam asthini	Shonitakshayat, panduvivrano, heenaroopa mriyatae.
5	Vrihati	Stanmoolatubayata pristavanshasya	Shonit atipravriti nimitair updravye mriyatae
6	Ansaphalaka	Presto upari pristavansham ubyata trikasambdhae ansapalakae	Bahvo swapa shosho
7	Ansa	Bahumurdha grivamadhyae nibandhanansapeethaskandha	Stabadha bahuta
Udarvajatrugat marma(37)			
1	Dhamaninela manya – 4	Kanthanadimaubayatochatsro damnayo	Mookta, swaravaikritam, ras agrahita
2	Siramatrika -8	Grivayam ubayatah	Sadhyo marnam
3	Krikatika – 2	Shiro grivyo sandhanae	Chalmurdhvata
4	Vidura – 2	Karnapristto adhah	Badhirta
5	Fana – 2	Ghranamargaubayatah srotomargapratibadhae abyantartah	Gandhaagyanam
6	Apanga – 2	Brupuchantayo akshanobahyato	Aandhya, dristiupghata
7	Aavarta – 2	Bruvoupari nimnayar	Aandhayam, dristiupghato
8	Shankha – 2	Bruvoantryoupari karnlalatmadhyae	Sadhyomarnam
9	Utkshep - 2	Shankhyo upari keshanta	Sashalyojivetpakatpatita shalyova, na udrut shalya
10	Sthapani - 1	Bruvo madhyae	Like utkshep marma
11	Simanta -5	Pancha sandhyah shirsi vibhakta	Unmad, bhaya, chitanasha
12	Shringataka - 4	Ghranashrotakshijihva santarpaninama	Sadhyomarnam
13	Adhipati – 1	Mastakabyantarataruparistata sirasandhisannipato romavartavata	Sadhyomarnam

Indications of Marma Chikitsa^[22]

1. Musculoskeletal disorder
2. Alimentary tract diseases
3. Respiratory tract diseases
4. Cardiovascular diseases
5. Neurological diseases
6. Genitourinary tract diseases
7. Metabolic disorders

8. Eye and Ear related disorders
9. Cerebral palsy, down syndrome, mental retardation, autism, speech disorders etc.

Methods of Application of Marma Therapy^[23]

While stimulating marma few questions arise in mind like – How to stimulate the marma point? How much should be the pressure during stimulation? How long should be the contact period during application of pressure? How many times stimulation should be applied in one sitting? How many times it should be repeated? There are different schools practicing in different ways. Dr Sunil Joshi says the pressure (while stimulating marma) should be optimal with contact time for .8 seconds (one cardiac cycle) and it should be repeated for 12-20 times (normal respiration rate per minute) in one sitting while others say 6 time stimulation in one sitting is sufficient.

Medical varmalogy affirms 12 stimulation methods for each varmam point to alleviate 48 different diseases. The uniqueness of the art of varmam is in abating 48 different diseases by stimulating a single varmam point.

The following are the general rules to be followed while administering varmam treatment:

1. Finger nails should be cut in both the hands and varmam points in the body should not be touched by the finger nails.
2. Don't talk to others while rendering varmam treatment and make the patient to sit or lie down during procedure.
3. It is sufficient to cure the diseases by rendering varmam treatment twice a week. But depending on the need of the patient and the intensity of the ailment, it can also be administered daily.
4. For indoor patients, the treatment can be administered once in six hours daily (4 times daily).
5. After rendering varmam treatment to each patient, it is necessary to touch the wall or any wooden objects before treating the next patient. This is to avoid the transfer of the body heat from one patient to another.
6. There are not many dietary restrictions for this treatment but it is better to avoid the consumption of curd and greens at night.
7. The pressure applied should be based on the age and the body condition of the patients.
8. Don't administer this treatment to patients who come with complaints of snake bite, scorpion bite and poisoning cases.

9. Make sure that patient is neither fasting nor full stomach.
10. Preferable times is morning hours after rising from the bed and attended morning toilette.^[24]

There are 12 methods of varmam application as following

1. Gentle movement
2. Mild movements
3. Clenching the varmam point along with the muscle
4. Slippery pinches
5. Mild tapping
6. Gentle stroking with fingers
7. Pressing point with a single finger
8. Balancing the energy of the points in the bone and joints
9. Placing the energy on the varmam point
10. Transferring energy from one point to another
11. Strengthening one nerve as that of the other
12. Touching and lifting the varmam point

All these 12 method can be executed on varmam point. The siddhars had propounded that the application of these 12 techniques on single point is capable of curing 48 different diseases.

Measurement and pressure

A profound knowledge of the finger measurement and the amount of pressure to be applied is essential for rendering varmam treatment. Maathirai means the method of touching the varmam point by the fingers and can be considered as a measure. If the varmam point is touched either with the interphalangeal joint of the thumb or the side tip of the thumb, it is considered as $\frac{1}{4}$ maathirai. If a point is stimulated with the soft pulp portion of the middle finger that is from the tip of middle finger to the distal interphalangeal joint then it is 1 maathirai. Similarly it is $\frac{3}{4}$ measures when the varmam point is stimulated with $\frac{3}{4}$ portion of this region and when $\frac{1}{2}$ of this portion is used then it is $\frac{1}{2}$ maathirai. In the art of varmam the pressure that has to be applied for treatment is the same as the pressure that is applied in the snapping of a finger. One snap of a finger is divided in to four stages:

1. Placing – $\frac{1}{4}$ maathirai pressure
2. Pressing – $\frac{1}{2}$ maathirai pressure
3. Twisting – $\frac{3}{4}$ maathirai pressure

4. Releasing – 1 maathirai pressure

Using above stated four different maathirai along with the 12 application methods will enable 48 types of applications on a single vaarmam point. When $\frac{1}{4}$ maathirai pressure is applied, the energy traverses through the bone marrow to cure the ailment. Similarly, for $\frac{1}{2}$ maathirai pressure the energy traverses through the nerve, for $\frac{3}{4}$ maathirai pressure the energy traverses through the bones and for I matrai pressure the energy flows through the bone marrow, nerve and the bones to cure the disease. Marma points are a double edged sword, whose results primarily depend upon the nature and extent of their stimulation. Therefore in Siddha system of medicine one fourth and half matra pressure is indicated for therapeutic purpose for beginners.

Role of Marma Therapy^[25]

1. Removes blocks in energy channels (srotas).
2. Pacifies doshas bringing it to normal path (especially vyanvayu which controls autonomic nervous system).
- 3 Creates physical, mental and emotional flexibility.
- 4 Creates an opportunity to experience powerful and dynamic transformation at physical, mental, emotional and spiritual level by building a positive link with the unconscious mind.

Disadvantages of Marma Chikitsa

During ancient times, knowledge of marma was known to kings and warriors. It was applied in battle fields to hit and achieve maximum lethal effect on enemies. This science was used both in warfare, surgery and later on martial arts too. Therefore if not used judiciously it can cause minor pain and disability to death of a patient or person.

Research Findings On & Related To Marma Therapy

According to Mishra DP et al. sadhyapranahara marma may be used to treat disorders related with pita dosha imbalance, vaikalyakar marma for kapha imbalance, vishalyghana and rujakar marma for vata imbalances.^[26]

Kshipra marma is related to head, brain, pituitary, pineal, hypothalamus, neck, throat, thyroid and parathyroid in acupressure where as in acupuncture stimulates lymphatic system.^[27]

Marry Fox et al. suggest that Marma therapy as an adjunct to conventional western multidisciplinary stroke rehabilitation should be feasible and safe.^[28]

Prasad Shishir et al. concludes that marma therapy is a promising, fast acting, cost effective, less time consuming, easy to use and non invasive alternative method for treatment of Avabahuka (adhesive capsulitis).^[29]

According to Wen Ching Liu et al. the Hoku point (L#4; large intestine #4), located at the dorsal surface of the web between the thumb and the index finger (kshipra marma) is a recognized acupoint for the induction of the analgesic effects of acupuncture. They concluded that PAG and somatosensory cortex respond to acupuncture with two distinct activity patterns. Stimulation of the acupoint, as opposed to the non-acupoint, increases the level of activity in both areas without altering their basic activity patterns.^[30]

DISCUSSION

From above and according to our experience we can conclude that Kshipra marma should be stimulated in every type of pain for its analgesia effect. Nearby marma of affected areas should be stimulated (Siddhars) with kshipra marma. Every marma points have their measures so in our opinion marma points should be stimulated according to their measure.

It has promising results in musculoskeletal disorders, cost effective, feasible, can be applied any time, with no side effects if applied properly and almost no special infrastructure is required. This is a universally sustainable type of medical system which can be used for therapeutic and preventive aspect of health.

CONCLUSION

A mechanism may be explored through functional magnetic resonance imaging (FMRI) and pharmacological studies.

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